3Com® Router 3000 DSL Family

DATA SHEET

- Secure and feature-rich enterprise-class DSL routers
- Efficient and streamlined single code base
- Standards-based and proven interoperability for simpler deployments

Key Benefits

The 3Com® Router 3000 DSL family of routers provides remote offices a secure business-class connection over a broadband DSL (Digital Subscriber Line) service. The routers include embedded security, VPN, and quality of service, and can help eliminate Internet security concerns and the delays which downloading large documents or images may cause. As a result, businesses can now spend their time working rather than waiting.

Cost-effective Performance

The Router 3000 DSL family provides all of the components needed to give remote office and tele-workers secure, cost-effective access to the Internet or corporate networks over a broadband connection.

Each router contains an integrated 4-port switch and a single DSL connection for high-speed communications. The 3Com Router 3031, 3034, and 3035 models also include an ISDN BRI S/T port, allowing businesses that require higher levels of redundancy and performance to choose a router that meets their specific needs.

Competitive Advantage

The routers can be desktop or wallmounted and come standard with a full complement of memory* and routing functionality. Security and quality of service capabilities are included as well.

Also included as standard are IP Routing, OSPF, RIP V1/2, BGP-4, multicast routing, Quality of Service (QoS), 802.1Q VLAN, stateful packet inspection firewall, and L2TP and IPSec VPN with encryption.

Unlike competitive products, there are no hardware, memory or software upgrades required—everything a business needs is included with the base system.

Standards-based Choices

Because these 3Com routers are designed to operate using the latest DSL industry standards, they interoperate with DSL equipment, enabling connections to virtually any broadband service provider deploying standards-based DSL services.

ADSL Models

3Com Routers 3030 and 3031 operate over ordinary analog phone lines (POTS - Plain Old Telephone Service) so there is no need for additional investment in extra phone lines or special wiring. These models conform to ITU-T 992.1 (G.DMT) (Annex A), ITU-T 992.2 (G.Lite), ITU-T 994.1 (G.handshake) and ANSI T1.413 Issue 2.

3Com Routers 3032 and 3035 operate over Integrated Services Digital Network (ISDN) lines for countries where the DSL service is offered in this way. These two models conform to ITU-T 992.1 (G.DMT) (Annex B), ITU-T 992.2 (G.Lite), ITU-T 994.1 (G.handshake) and ANSI T1.413 Issue 2.

G.SHDSL Models

Router models† 3033 and 3034 operate using the latest business-class standard of DSL known as G.SHDSL (Symmetric High-speed Digital Subscriber Line). This standard of DSL provides symmetrical broadband service for mission-critical and time-sensitive applications such as IP telephony or high-speed database synchronization. G.SHDSL supports symmetric speeds of up to 2.3Mbps over single pair wires, or 4.6Mbps over two-pair wires. These models support the ITU-T G991.2 specification.

* Currently available maximum: 64 MB
† Availability Q4CY04

Features

Managed Service Providers

For service providers, these new routers revolutionize the traditional business model for DSL value-added services by making it possible to deploy intelligent DSL customer premise equipment in a constantly changing environment. Because 3Com routers offer the same user interface, staff learning curves are minimal, which expedites deployments and maximizes revenue streams.

When it comes to management and remote provisioning, the Router 3000 DSL family continues 3Com's tradition of simplicity and ease-of-use. The routers lower the total cost of ownership and expedite service delivery by providing service providers with the necessary tools required to minimize truck rolls and installation and maintenance time, sustaining a high quality of service for customers. Configuration and deployment is available locally or remotely via a Telnet, Rlogin or Secure Shell protocol to the router.

When managed with 3Com Network Director, bulk-updating of remote router code, configuration backup, auto-trap setup, and historical reporting are all just a mouse click away. Advanced remote diagnostics are accomplished using the embedded diagnostic tools to quickly isolate problem conditions.

For service providers provisioning service level agreements, models available with ISDN backup can offer a resilient solution for customers requiring the benefits of broadband with the security of a fail-safe and always-on connection.

Enterprise-Class Features

The 3Com Router 3000 family supports enterprise-level routing with:

- Standards-based interoperability
- Advanced security and control
- Voice and data integration
- Easy deployment and management
- World-class service, support and training

Standards-Based and Interoperable

3Com routers can be confidently used in a mixed-vendor network, as they have been designed to be standards-compliant and interoperable.

Advanced Security and Control

Operating across a broadband internet connection opens up the network to potential security breaches. However, by deploying a solution that is *broadband Internet aware*, businesses can take advantage of this low-cost, yet high-speed, business tool.

The 3Com Router 3000 DSL family helps secure and safeguard sensitive client and company information against unauthorized access by incorporating 3Com's layered approach to security.

These security and control features include: AAA, RADIUS authentication support, stateful packet inspection firewall, denial of service blocking (DoS), Access Control Lists (ACLs), and others. L2TP and IPSec VPNs, with 3DES and AES encryption, further help provide secure networks.

The embedded stateful packet inspection firewall also includes support for ACLs, GRE (generic routing encapsulation), NAT (network address translation), NAT traversal and application layer gateways, allowing mission-critical business applications to operate through the firewall and across the VPN.

Voice and Data Integration

The Router 3000 DSL family delivers advanced Quality of Service (QoS), including DiffServ support for traffic management capabilities. Utilizing IP differentiated services for applications and ATM QoS for traffic and physical layer prioritization, the routers are equipped to handle the most demanding voice and data networking, helping assure the level of service required for business operations.

Bundled with IEEE 802.1p prioritization and IEEE 802.1Q VLAN support, the routers help provide the service levels required to maintain expected quality and productivity; for example, just the right bandwidth and frame latency for delay-sensitive traffic and applications such as voice over IP or video. This allows the network to effectively expedite application and data delivery—even during times of heavy network use.

Features *(continued)*

Management & Provisioning

GUI management of the router is supported by 3Com Router Manager, included† with 3Com Network Director and 3Com Network Administrator. Together, these applications provide sophisticated router management including bulk-updating of remote router code and configuration backup, auto-trap setup and monitoring, router system status and historical reporting.

An intuitive and easy-to-use CLI interface can be accessed directly, or remotely via Telnet, Secure Shell or Rlogin; other management applications may also be used. In addition, the Info Center diagnostic tool, available through the CLI interface, quickly diagnoses trouble spots and reports back for quick and immediate action.

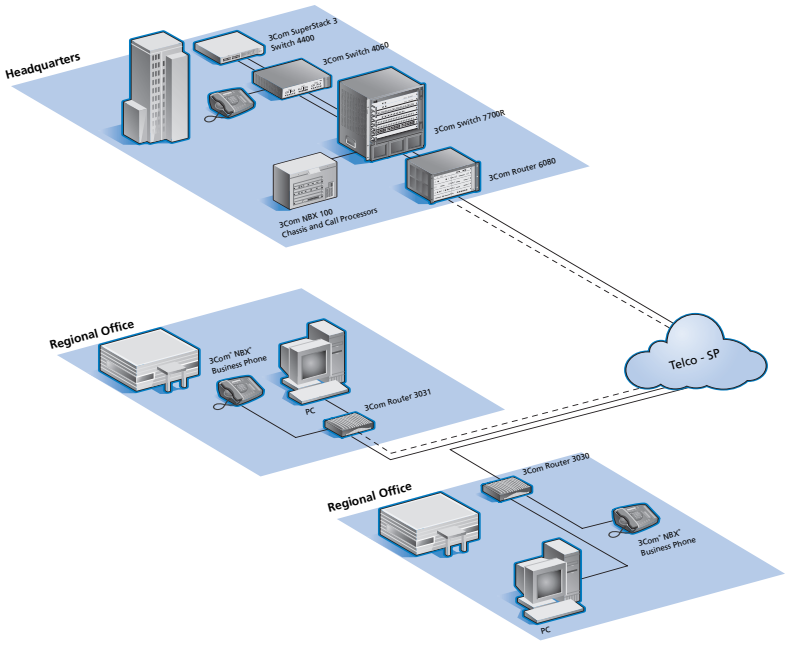
World-Class Service, Support and Training

The 3Com Router 3000 DSL family is backed by 3Com Global Services and its authorized partners' expertise in assessment, implementation, and maintenance of your network. Trained personnel—competent in a variety of network environments—provide assistance through all phases of the network lifecycle with services that include, but are not limited to, project management, troubleshooting, and training.

3Com Router 3000 DSL Family Highlights

FEATURE	BENEFIT	3COM ROUTER 3000 DSL FAMILY
Broadband Ready	• Standards-based support for global broadband DSL WAN interfaces • ISDN dial-backup or leased-line for fail-safe connectivity*	• ADSL over POTS • ADSL over ISDN • G.SHDSL • ISDN Backup*
Security and Control	• Protection of corporate data, assets and resources • Security from unauthorized access • Secure access for authorized entities	• VPN: L2TP, GRE, IPSec • Stateful packet inspection firewall, ACLs, NAT, DoS blocking • AAA, RADIUS, PAP/CHAP
Management	• Ability to securely manage and control across the enterprise • Remote diagnostics and reporting	• 3Com Router Manager††, CLI, SSH, Telnet • SNMP v 1, 2, and 3, Telnet • Info Center (diagnostic tool)
Voice/Data Support	• Effective management of voice and real-time traffic delivers top-quality transmission • Assured availability of bandwidth for key applications	• IP QoS (CAR, LAR, GTS, FIFO, PQ, CQ, WFQ, WRED, LLQ); IEEE 802.1p • Multicast routing protocols (IGMP, PIM-SM, PIM-DM) • IEEE 802.1Q VLAN, Inter-VLAN Routing
Resilience	• Minimize downtime • Dial-backup (ISDN)*	• VRRP (Virtual Router Redundancy) • ISDN backup* • Dial Control Center

3Com routers offer a variety of WAN connection options that allow your business to quickly and easily connect up remote sites and locations.



* Router models 3031, 3034, and 3035 only
† Available as an optional purchase
†† Included with 3Com Network Director and 3Com Network Administrator, available as an optional purchase

Specifications

Local Interface
Four-Port 10BASE-T/100BASE-TX switch
Autosense MDI/MDX crossover
Console – RS-232c

WAN interface
RJ-11 ADSL or G.SHDSL dependent on model
RJ 45 ISDN BRI S/T with Router 3031, 3034, 3035 models
Full Rate ADSL: ANSI T1.413, Issue 2, ITU G.992.1 (G.dmt)
Sub Rate ADSL: ITU G.992.2 (G.lite)
GlobespanVirata GS3780-174-001Z chipset

WAN service support
RFC-2516: PPP over Ethernet (PPPoE)
RFC-2364: PPP over ATM (PPPoA)

ATM Attributes
ATM Service Class: UBR, VBRnt, VBRrt, CBR
AAL Type: AAL5
Virtual Circuits: Up to 32
Per VC Queuing

Performance Capability
ADSL: up to 8 Mbps downstream; up to 800Kbps upstream
G.SHDSL: Symmetric, 2.3 Mbps max. over 2 wires; 4.6Mbps max. over 4 wires
ISDN BRI S/T: 2 x 64Kbps
(ADSL and G.SHDSL speeds dependent on loop length, and other environmental factors)

VPN Capability
100 VPN Tunnels
DES, 3DES, AES Encryption
L2TP, IPSec, GRE

Ports
Router 3030: One RJ-11 ADSL (over POTS)
Router 3031: One RJ-11 ADSL (over POTS), One RJ-45 ISDN BRI S/T
Router 3032: One RJ-11 ADSL (over ISDN)
Router 3033: One RJ-11 G.SHDSL
Router 3034: One RJ-11 G.SHDSL, One RJ-45 ISDN BRI S/T
Router 3035: One RJ-11 ADSL (over ISDN) One RJ-45 ISDN BRI S/T

All models:
Four 10BASE-T/100BASE-TX ports
One Console Port

Processor
MPC 859DSL - **80** MHz

Memory
SDRAM: 64 MB
Flash: 8 MB

Dimensions *(dimensions measured to highest arc points of the chassis panel)*
Depth: 18.0 cm (7.1 in)
Width: 30.0 cm (11.81 in)
Height: 4.5 cm (1.77 in)
Weight: 1 kg (2.2 lb)

Power Supply
External power supply :
Input: 100-240VAC, 50/60Hz (rated voltage), 90-264VAC, 50/60Hz (maximum tolerance); 0.5A~1A
Output: 12VDC; 1A

Router:
12W maximum power consumption

Environmental Requirements
Storage temperature: -40°C to +70°C
Operation temperature: 0°C to +40°C
Humidity Range: 5% to 90%

MTBF
Router 3030: 40 years (347,000 hours)
Router 3031: 39 years (338,000 hours)
Router 3032: 41 years (363,000 hours)
Router 3033: 40 years (352,000 hours)
Router 3034: 39 years (345,000 hours)
Router 3035: 41 years (362,000 hours)

Regulatory Compliance
CE Mark for European Union, Council Directive 99/5/EC

Safety
UL 60950 3rd Edition
CAN/CSA-C22.2 #60950
EN 60950
IEC 60950
AS/NZS60950: 2000

Emissions
CISPR 22 Class B
EN55022 Class B
FCC Part 15, CFR 47 Class B
ICES-003 Class B
AS/NZS CISPR22 Class B
VCCI V-3 Class B

Immunity
CISPR 24
EN 55024
EN 61000-3-2, EN 61000-3-3, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, and EN 61000-4-11

Warranty Terms
Hardware: 1 year
Software: 90 days
See *www.3Com.com/warranty* for details.

Management
3Com Network Director
3Com Network Administrator
3Com Network Supervisor
3Com Router Manager
SNMP management

Ordering Information

PRODUCT DESCRIPTION	SKU
3Com Router 3030 *3Com Router 3030, 1 x ADSL (over POTS), 4 x 10/100 (Annex A)*	3C13630
3Com Router 3031 *3Com Router 3031, 1 x ADSL (over POTS), 4 x 10/100, 1 x ISDN-S/T (Annex A)*	3C13631
3Com Router 3032 *3Com Router 3032, 1 x ADSL (over IDSN), 4 x 10/100 (Annex B)*	3C13632
3Com Router 3033 *3Com Router 3033, 1 x G.SHDSL, 4 x 10/100*	3C13633†
3Com Router 3034 *3Com Router 3034, 1 x G.SHDSL, 4 x 10/100, 1 x ISDN-S/T*	3C13634†
3Com Router 3035 *3Com Router 3035, 1 x ADSL (over ISDN), 4 x 10/100, 1 x ISDN-S/T (Annex B)*	3C13635

SERVICE

3Com recommends a 3Com Express℠ service contract for the Router 3000 DSL family, which provides telephone technical support, hardware replacement, and software upgrades to ensure that any technical issues are resolved quickly and efficiently. Express support is available with 8x5 or 24x7 response time options for telephone support. Choose next-business-day or 4-hour response for advance hardware replacement. Availability may vary by geographic location.

Order 3Com Router Installation service to ensure a successful result, faster deployment, and minimize the risk of disruption to your business.

† Expected availability Q4CY04

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To learn more about 3Com solutions, visit www.3com.com. 3Com Corporation is publicly traded on NASDAQ under the symbol COMS.

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